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U. S. DEPARTMENT OF AGRICULTURE,

STATES RELATIONS SERVICE.

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TYPES AND BREEDS OF FARM ANIMALS.

SUGGESTIONS FOR TEACHERS IN SECONDARY SCHOOLS.¹

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INTRODUCTION.

As economic conditions require more efficient farming, the importance of pure-bred live stock increases. If we consider that the chief aim in teaching agriculture in the secondary school is to increase efficiency in farming, we must emphasize the importance of good breeding. Although the specific aim in teaching agriculture may be the making of better farmers, we should not lose sight of the fact that the general aim of education is to develop better men. Each subject should contribute to this higher aim. A study of types and breeds of live stock should not only aid in making better farmers, but it should also contribute to the making of better men. When young men see what has been accomplished in the improvement of farm animals, it should give them assurance of opportunity in this branch of agriculture and inspire them to make a contribution to its future progress.

RELATION OF SUBJECT TO COURSE OF STUDY.

As a beginning in animal husbandry.—With abundant use of good illustrations and living animals of good type the study of types and breeds may be made so interesting that it affords an excellent beginning for a general course in animal husbandry. In a large number of successful courses a study of the types and breeds of all farm animals is made at the beginning of the course. Such an arrangement permits of greater concentration upon the study and the closely related practice in judging. Some schools have courses in breeds and judging apart from the other phases of animal husbandry. Such a degree of specialization is better suited to the college than to the secondary curriculum.

As an introduction to the various groups of farm animals.—In other courses in animal husbandry the various farm animals are considered as groups with a study of types and breeds serving as an introduction to the particular group. For example, dairy cattle and milk production is considered one phase of animal husbandry, beginning with a study of dairy types and breeds followed by a study of milk production. In like manner the types and breeds of horses are followed with a consideration of their care and management. Such an arrangement is logical in that it gives a better opportunity to show the relation of type to function. If the work in judging is to coincide with class-room study it will not all come in the same season, but will be distributed throughout the year, which in many cases will be desirable, as judging constitutes one of the most important phases of the practical work in animal husbandry for secondary schools.

¹Prepared under the direction of C. H. Lane, Chief Specialist in Agricultural Education, States Relations Service.

Adaptation to students and community.—It is to be expected that the time given to this subject will depend upon the school, its equipment, and teaching force. The course given should also depend upon the needs of the students and the community in which they live. It would be expected that in the hills of New England most of the time would be spent upon dairy cows and lighter types of horses, with due attention to sheep. In some sections of the corn belt a study of such animals may give way in large measure to a consideration of beef cattle, draft horses, and swine. Such local adaptation should apply also to breeds. Those breeds most used and best fitted for any locality should receive attention to the neglect of breeds which have no local importance. As students will have a special interest in those animals which they may use in their home projects, special attention should be given those suitable for the boys to manage upon their own account. If the subject has been handled from the point of view of the boys' interests, the students will not be satisfied with anything but animals of good breeding in their projects.

CLASSROOM INSTRUCTION.

Organization of subject matter.—The following outline should prove suggestive of a logical treatment of the subject in the classroom. As suggested above, it should be adapted to meet local conditions.

CATTLE.

I. The dairy type.

1. Purpose of the dairy cow.
2. Characteristics of type.
3. The score card for dairy cattle.
4. Importance of scales and the Babcock test as an aid to judging.

II. Breeds of dairy cattle.

1. The Jersey.
 - (a) Origin—history.
 - (b) Breed characteristics.
 - (c) Production (or performance).
 - (d) Official breed organization.

NOTE.—A similar outline may be adapted to all the following breeds of farm animals, with greatest emphasis on those breeds important in the school district.

2. The Guernsey.
3. Holstein.
4. Ayrshire.
5. Brown Swiss.
6. Dutch Belted.

III. The beef type.

1. Purpose of beef cattle.
2. Characteristics of type.

III. The beef type—Continued.

3. Comparison with dairy type.
4. The score card for beef cattle.
 - (a) The cow.
 - (b) The bull.

IV. Breeds of beef cattle.

1. The Shorthorn and Polled Durham.
2. The Hereford.
3. The Aberdeen Angus.
4. The Galloway.
5. The West Highland.

V. Dual-purpose cattle.

1. Purpose of dual-purpose cattle.
2. Form and general appearance.
3. Comparison with beef and dairy types.

VI. Breeds of dual-purpose cattle.

1. The Shorthorn and Polled Durham of this type.
2. The Red Polled.
3. The Devon.

VII. Market classes and grades of cattle.¹

1. The ultimate judge of beef cattle.
2. Carcass beef—classes.
3. Feeders.

¹ In sections where feeding cattle for market is important this subject may properly come after a study of the beef type.

HORSES AND MULES.

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| <p>I. Types of light horses.</p> <ol style="list-style-type: none"> 1. Function of light horses. 2. Structure and conformation. 3. The light-harness type. 4. The score card for light-harness horses. 5. The saddle horse. <p>II. Breeds of light horses.</p> <ol style="list-style-type: none"> 1. The Arabian. 2. The Thoroughbred. 3. The Morgan. 4. The Standard bred. 5. The American saddle horse. <p>III. Coach horses.</p> <ol style="list-style-type: none"> 1. Function of coach horses. 2. The coach type. 3. The score card for coach horses. 4. Coach breeds. <ol style="list-style-type: none"> (a) German coach. (b) Hackney. (c) French coach. (d) Cleveland bay. <p>IV. The draft type.</p> <ol style="list-style-type: none"> 1. Function of draft horses. 2. Structure and conformation. 3. The draft type. 4. Comparison of draft horse with other types. 5. The score card for draft horses. <p>V. Breeds of draft horses.</p> <ol style="list-style-type: none"> 1. The Percheron. 2. The Belgian. | <p>V. Breeds of draft horses—Continued.</p> <ol style="list-style-type: none"> 3. The Shire. 4. The Clydesdale. 5. The Suffolk. <p>VI. Ponies.</p> <ol style="list-style-type: none"> 1. The Shetland. 2. Welsh and English ponies. <p>VII. The jack and the mule.</p> <ol style="list-style-type: none"> 1. Comparison of mule with the horse. 2. Place of mule in local agriculture. 3. Types and breeds of jacks. 4. Conformation and types of mules. 5. The score card for the jack and mule. <p>VIII. Market classes and grades.</p> <ol style="list-style-type: none"> 1. General consideration of horse market. <ol style="list-style-type: none"> (a) Local demands. 2. Examination for unsoundness. 3. Estimating the age of horses. 4. Classes and grades of driving horses. 5. Classes and grades of saddle horses. 6. Classes and grades of draft horses. 7. Classes and grades of ponies. 8. Classes and grades of mules. |
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SWINE.

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| <p>I. The lard type.</p> <ol style="list-style-type: none"> 1. Purpose and development of the type. 2. Characteristics of type. 3. The score card for fat hogs. 4. Packing-house demands. <p>II. The bacon type.</p> <p>(Same as for lard type.)</p> <p>III. Breeds of swine.</p> <ol style="list-style-type: none"> 1. Berkshire. 2. Poland China. 3. Duroc Jersey. | <p>III. Breeds of swine—Continued.</p> <ol style="list-style-type: none"> 4. Chester White and Ohio Improved Chester. 5. Hampshire. 6. Large Yorkshire. 7. Tamworth. 8. Any of the following breeds or others which may be of local importance: Small and Middle Yorkshire, Mule foot, Cheshire, Victoria, Essex. |
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SHEEP AND GOATS.

I. The mutton type.

1. Relation of type to efficiency in mutton production.
2. Characteristics of type.
3. The score card for mutton sheep.
4. Market grades and classes.

II. The fine wool type.

(Adaptation of outline for mutton type.)

III. Breeds of sheep.

1. Fine wool.
 - (a) American Merino.
 - (b) Delaine Merino.
 - (c) Rambouillet.

III. Breeds of sheep—Continued.

2. Medium (or middle) wool.

- (a) Southdown.
- (b) Shropshire.
- (c) Hampshire.
- (d) Oxford.
- (e) Dorset Horn.
- (f) Suffolk.
- (g) Cheviot.

3. Long wool.

- (a) Cotswold.
 - (b) Lincoln.
 - (c) Leicester.
- Kent, or Romney Marsh.

IV. Goats.

1. Milch goats.
2. Angora goats.

Use of reference material.—The special textbooks covering this subject have been written for college students and treat the subject in too exhaustive a manner for most secondary schools. On the other hand the general texts in elementary animal husbandry may not treat breeds of local importance extensively enough. The special books on breeds may be used to supplement the general texts. The following Farmer's Bulletins will prove helpful also in supplementing the text or used in lieu of a textbook: 106, Breeds of Dairy Cattle; 576, Breeds of Sheep for the Farm; 612, Breeds of Beef Cattle; 619, Breeds of Draft Horses; 765, Breeds of Swine. These bulletins may be supplemented for special assignments with others listed at the end of this article. If any student has an interest in a breed or any phase of the subject which is not of general importance in the class he may be given a special assignment to make a report upon the subject.

Use of illustrative material.—In establishing ideals as to types and breeds there is nothing better than living material if good specimens may be obtained. A teacher not thoroughly familiar with the district in which he is teaching should have his students aid him in making a live-stock survey of the district in order that he may locate good animals for class use as well as to determine the needs and interests of the community. He may require each student to report the number and kind of farm animals upon a number of farms. In some cases more comprehensive farm surveys are made which include this information. A distinction is made between the use of living animals to acquaint the students with the type or breed and practice in judging. Students may learn a great deal about types and breeds of live stock by visiting a stock farm or a fair without having any practice in judging.

In lieu of suitable living material and in connection with the use of the living animals abundant use should be made of charts and pictures showing good and bad in type and breed. Some of the best farm papers and live-stock journals have excellent illustrations of farm animals. If files are not kept of these papers the suitable pictures should be clipped and mounted on cardboard and filed so that they may be readily available when needed. Some progressive teachers are making good use of a camera on their visits to stock farms and fairs and building up a useful collection of original photographs. In case the teacher has little time or inclination for such work he may interest some of his students in animal photography.

The most satisfactory use of photographic material is in the form of lantern slides. A stereopticon is almost indispensable in teaching types and breeds. Lantern slides

showing many of the best representatives of the different breeds and contrasting the good and bad in different types may be borrowed and used at relatively slight expense.¹ Charts showing outlines with naming of parts, cuts of meat, etc., may be made in the form of slides and projected for the use of the class. Such charts may be made in permanent form by making the outline on tracing cloth mounted on a lantern slide, projected onto cloth and traced. Light colored window shades serve well for such charts, as they may be rolled up and put out of the way when not in use. Teachers with ability to draw will make abundant use of the blackboard in sketching outlines showing type forms. Some of the breed associations furnish pictures and charts portraying the breed represented.

PRACTICUMS.

*Practice in judging:*²—Practice in judging live stock has become very intimately associated with a study of types and breeds in the secondary school. Many successful teachers consider the classroom study but preparatory to the practical work in judging. It will not be possible in the time available in the ordinary high-school course to train expert judges. The work should arouse a permanent interest on the part of all the students and establish a foundation upon which those who have special aptitude along that line may build well as specialists. Practice in judging may be made of special educational value in developing the powers of observation and in developing judgment.

Preparing for a judging trip.—Exercises in stock judging, like other field trips, are often failures because proper preparation is not made. The teacher should know beforehand just where he is going and what he is going to do. Most secondary schools are dependent upon the animals of neighboring farms. Wide-awake teachers take advantage of local fairs and collections of animals gathered for sale or shipment. Arrangements should be made with the owners of the animals that there will be no misunderstanding upon taking the class upon their premises. The teacher should have a definite aim for each trip and select herds which contain animals suitable to his purpose. He should also, as far as possible, select farms where conditions are favorable for judging. It is important to see that there are suitable inclosures and facilities for handling the animals. If weather is unfavorable, facilities for working under cover will be necessary. Wet, muddy barnyards are to be avoided. At times it will be better to have the animals brought to the school than to take the class to the farm. This is especially true of driving horses. The instructor will find it to his advantage to examine thoroughly the animals he intends to use. When comparative judging is practiced it is especially important that the teacher be well acquainted with the animals and their relative points. The judging trip should be announced ahead of time so that all students may be prepared for outside work without delaying the class.

Use of the score card.—The score card is not used to any extent at the present time in judging animals in the show ring. It may be used to good advantage, however, in training students how to judge. It may be considered as a brief detailed description of a perfect animal designed to aid them in establishing an ideal. The card should aid them also in making a systematic examination of the animal with close attention to details, and should give them a sense of relative values in judging. It should be borne in mind that all score cards are arbitrary in their assignment of values. Varia-

¹ Lantern slides illustrating types and breeds of farm animals may be obtained from the Agricultural Instruction Division of the States Relations Service. A list of these slides with directions for obtaining them will be furnished on application.

² For specific directions for judging the various groups of farm animals, see the following department bulletins: 434, Judging the Dairy Cow as a Subject of Instruction in Secondary Schools. 487, Judging Horses as a Subject of Instruction in Secondary Schools. Also Agricultural Education Monthly, Vol. II, No. 7, Teaching Swine Judging in Secondary Schools.

tion in score cards is likely to continue, as there will always be a difference of opinion upon the relative values of minor points and upon forms of grouping. Score cards covering general types are often furnished by the State agricultural colleges for use in school. Score cards for breeds are often furnished by the national record associations.¹

Time should be taken in the classroom for the students to become familiar with the score card, the naming of the parts of the animal and the terms used in judging. After the students have become familiar with the score card and the method of approaching the animal they may make individual scores. Each student should work independently. Conversation and comparison of scores should be avoided while the work is being done. The teacher should use his judgment in determining whether his time may be spent better in aiding the students or in scoring the animal as a basis for checking upon their results. One of the chief purposes in using a score card is to train the student in observation that no details will be overlooked. The card gives the score for perfection in the various parts. With some cards the student enters a score representing the amount which he judges the animal to be deficient. The sum of these deficient amounts subtracted from 100 gives the score of the animal. As a rule no defect should result in a cut to exceed half of the total number of points allowed for the part under consideration. Other cards provide for a positive percentage scoring of each point on the following basis: 1.0, perfect; 0.9, very slight defect; 0.8, slight defect; 0.7, defective; 0.6, marked defect; and 0.5, poor. The number of points for the particular part of the animal is multiplied by the percentage score given by the student for that part.

Comparative judging.—As suggested, the scoring of animals is but preliminary to what is now considered the more efficient method of judging, that of comparison and placing according to merit. After continued practice in the use of the score card the students should be prepared to take in the general conformation and detect the details which indicate the worth of the animal. In trying out the judgment of students in comparative judging, the usual practice is to take four animals at first which have marked difference in value. As skill is developed animals more nearly equal should be chosen. In all cases very definite reasons should be given by the student for his placing.

Judging teams and contests.—In some States each high school teaching agriculture has a stock-judging team which enters a State-wide or district contest. In some schools it is considered as great an honor to “make the judging team” as it is to gain that distinction in athletics. A team of three to five members is selected from the class members doing the best work. The special training given these students is for the most part considered as an extra-class activity. However valuable this work may be to the students selected and as a means of developing school spirit, it should not be done to the neglect of other members of the class who may be more in need of special help. As it is impossible for the students in the course of a year to become in any sense expert in judging all kinds of live stock, those in charge of the contests may very well select but one class of animals per year. The State fair is usually the rallying point for the contest between local teams.

Fairs and local stock shows.—Progressive teachers will take every possible advantage of live-stock exhibitions as training for their students. Whether the students are in a judging contest or not, visits to fairs may be made highly valuable if properly organized and supervised. The better fairs not only give the students an opportunity to see the best live stock of the section represented but they also give them an opportunity to observe the method of experienced judges. The class should be kept together under the direction of the teacher or some man who knows boys as well as live stock. Judges will often take more time in giving explanations of reasons for their placing if interested students are observing them. The fairs give an oppor-

¹ Lists of these associations will be furnished by the Bureau of Animal Industry of this department.

tunity for comparison of types and breeds which is seldom afforded in the school district.

Local stock shows at the school should be encouraged, as they aid in arousing interest in the community and afford judging material for the students. The most successful of these exhibits are specialized, such as a colt show or a calf show. If these shows are exhibits of the animals owned by the students in connection with their projects, so much the better. As a rule, however, the whole district should be drawn upon and the exhibit made a community affair.

TYPES AND BREEDS OF POULTRY.

Relation to course of study.—Although poultry keeping is considered a phase of animal husbandry, the fowls of the farm constitute such a distinct group of animals that any consideration of poultry is generally treated as a distinct part of a general course. An appreciation of the educational value of poultry and the adaptability of the industry to the home-project plan is causing many secondary schools to give a separate course in poultry husbandry.

Any detailed study of a large number of breeds and varieties must be made at the expense of more important phases of poultry husbandry. In sections where the whole community is devoted to breeding one or two varieties of breeds which meet well the local needs, little attention need be given a consideration of types and breeds in general. Local conditions should be understood by the teacher and the course adapted to meet their needs. In most sections the study should be confined largely to utility types, with a relatively few representative breeds. The raising of a number of breeds and varieties by the students should be discouraged and an effort made to center the attention of the district upon one kind of fowl as a basis for community breeding.

Use of illustrative material.—The statements made regarding the use of illustrative material in connection with a study of the types and breeds of the larger farm animals will apply in a general way to the teaching of types and breeds of poultry. Excellent illustrative material for use in the classroom is even more abundant in the case of poultry than it is in relation to other farm animals. A number of the poultry journals furnish colored plates of fowls suitable for classroom use and for hanging upon the walls. As it is convenient to bring poultry into the classroom, a number of exhibition coops should be a part of the school equipment. Such coops may be made by the students. Life-size outline drawings may be made upon cardboard of the breeds and varieties important in the community. Such drawings made by the students with care should aid in visualizing the ideal shape of the breed represented. These outlines may be made into charts to show color and feather markings in the following manner: Each student should be required to make a collection of representative feathers showing ideal color and markings for both hen and cock of the variety in which he may have the greatest interest. These feathers should be mounted then upon the part represented on the outline drawing. Although such cards may be used for teaching other students, their chief educational value comes from their making.

Use of reference material.—If there is time for any detailed consideration of the standard requirements of fowls, the American Standard of Perfection should be available for use of students. The teacher should have a copy in any case. A copy of Farmers' Bulletin No. 51, Standard Varieties of Chickens, should be secured by each student. This bulletin will meet most of the needs of secondary classes if supplemented with good reference books. A number of books on poultry have been recently published for the use of schools. As the students will doubtless have a variety of interests, these should be considered and encouraged in individual assignments.

Standard classification.—Before any classification is taken up the students should understand the following terms: Class, a major grouping based largely on origin and purpose; breed, a grouping of fowls with like inherited characteristics in such important characters as shape and size; variety, a subdivision of breed to cover differences in secondary characters, such as color, and kind of comb. It is assumed that in connection with their former study the students will understand the correct use of such terms as mongrel, crossbred, and pure bred. The term “standard bred,” when applied to poultry, means a pure-bred fowl recognized by the American Standard of Perfection, which gives the following classification of poultry, which it will be seen is based largely upon origin. Although there may be little time for a consideration of this classification, it is well for the students to get an idea of the great number of recognized breeds and varieties and their grouping according to geographic origin.

CLASS I. AMERICAN.

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| 1. Plymouth Rocks.
(a) Barred.
(b) White.
(c) Buff.
(d) Silver Penciled.
(e) Partridge.
(f) Columbian. | 2. Wyandottes.
(a) Silver.
(b) Golden.
(c) White.
(d) Buff.
(e) Black.
(f) Partridge.
(g) Silver Penciled.
(h) Columbian. | 3. Javas.
(a) Black.
(b) Mottled.
4. Dominiques.
5. Rhode Island Reds.
(a) Single Comb.
(b) Rose Comb.
6. Buckeyes. |
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CLASS II. ASIATIC.

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| 1. Brahmas.
(a) Light.
(b) Dark. | 2. Cochins.
(a) Buff.
(b) Partridge.
(c) White.
(d) Black. | 3. Langshans.
(a) Black.
(b) White. |
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CLASS III. MEDITERRANEAN.

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| 1. Leghorns.
(a) Single Comb Brown.
(b) Rose Comb Brown.
(c) Single Comb White.
(d) Rose Comb White.
(e) Single Comb Buff.
(f) Rose Comb Buff.
(g) Single Comb Black.
(h) Silver.
(i) Red Pyle. | 2. Minorcas.
(a) Single Comb Black.
(b) Rose Comb Black.
(c) Single Comb White.
(d) Rose Comb White.
(e) Single Comb Buff. | 3. Spanish.
(a) White-faced Blacks.
4. Blue Andalusians.
5. Anconas.
(a) Single Comb.
(b) Rose Comb. |
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CLASS IV. ENGLISH.

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| 1. Dorkings.
(a) White.
(b) Silver-Gray.
(c) Colored. | 3. Orpingtons.
(a) Single Comb Buff.
(b) Single Comb Black.
(c) Single Comb White.
(d) Single Comb Blue. | 4. Cornish.
(a) Dark.
(b) White.
(c) White-laced Red.
5. Sussex.
(a) Speckled.
(b) Red. |
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CLASS V. POLISH.

1. Polish.	1. Polish—Continued.	1. Polish—Continued.
(a) White-Crested Black.	(d) Buff-Laced.	(f) Non-Bearded Silver.
(b) Bearded Golden.	(e) Non-Bearded Golden.	(g) Non-Bearded White.
(c) Bearded Silver.		

CLASS VI. HAMBURGS.

1. Hamburgs.	1. Hamburgs—Continued.	1. Hamburgs—Continued.
(a) Golden Spangled.	(c) Golden Penciled.	(e) White.
(b) Silver Spangled.	(d) Silver Penciled.	(f) Black.

CLASS VII. FRENCH.

1. Houdans.	2. Creve coeurs.	4. Faverolles.
(a) Mottled.	(a) Black.	(a) Salmon.
(b) White.	3. La Fleche.	
	(a) Black.	

CLASS VIII. CONTINENTAL.

1. Campines. (a) Silver. (b) Golden.

CLASS IX. GAMES AND GAME BANTAMS.

1. Games.	1. Games—Continued.	2. Game Bantams—Contd.
(a) Black-Breasted Red.	(f) Red Pyle.	(c) Golden Duckwing.
(b) Brown-Red.	(g) White.	(d) Silver Duckwing.
(c) Golden Duckwing.	(h) Black.	(e) Birchen.
(d) Silver Duckwing.	2. Game Bantams.	(f) Red Pyle.
(e) Birchen.	(a) Black-Breasted Red.	(g) White.
	(b) Brown-Red.	(h) Black.

CLASS X. ORIENTALS.

1. Sumatras.	2. Malays.	3. Malay Bantams.
(a) Black.	(a) Black-Breasted Red.	(a) Black-Breasted Red.

CLASS XI. ORNAMENTAL BANTAMS.

1. Sebrights.	5. Cochin.	7. Polish.
(a) Golden.	(a) Buff.	(a) Bearded White.
(b) Silver.	(b) Partridge.	(b) Buff-Laced.
2. Rose-Comb.	(c) White.	(c) Non-Bearded.
(a) White.	(d) Black.	8. Mille Fleur.
(b) Black.	6. Japanese.	(a) Booted.
3. Booted.	(a) Black-Tailed.	
(a) White.	(b) White.	
4. Brahmas.	(c) Black.	
(a) Light.	(d) Gray.	
(b) Dark.		

CLASS XII. MISCELLANEOUS.

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| 1. Silkies. | 2. Sultans. | 3. Frizzles. |
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CLASS XIII. DUCKS.

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| 1. Pekin.
(a) White. | 5. East India.
(a) Black. | 9. Crested.
(a) White. |
| 2. Aylesbury.
(a) White. | 6. Muscovy.
(a) Colored. | 10. Runner.
(a) Fawn and White. |
| 3. Cayuga.
(a) Black. | (b) White. | (b) White. |
| 4. Call.
(a) Gray. | 7. Swedish.
(a) Blue. | (c) Penciled. |
| (b) White. | 8. Buff. | |

CLASS XIV. GEESE.

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| 1. Toulouse.
(a) Gray. | 3. African.
(a) Gray. | 5. Wild or Canadian.
(a) Gray. |
| 2. Embden.
(a) White. | 4. Chinese.
(a) Brown. | 6. Egyptian.
(a) Colored. |
| | (b) White. | |

CLASS XV. TURKEYS.

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| 1. Turkeys.
(a) Bronze.
(b) Narragansett. | 1. Turkeys—Continued.
(c) White Holland.
(d) Black. | 1. Turkeys—Continued.
(e) Slate.
(f) Bourbon Red. |
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Utility classification.—A classification based upon the economic usefulness of fowls should be more important in a secondary course. The following classification covers the important utility breeds of common fowls:

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| I. Egg breeds.
1. Leghorn.
2. Minorca.
3. Ancona.
4. Campine. | II. Meat breeds.
1. Brahma.
2. Langshan.
3. Cochin.
4. Cornish. | III. General purpose.
1. Plymouth Rock.
2. Wyandotte.
3. Rhode Island
Red.
4. Orpingtons. |
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A study of types.—The three classes given above represent the important utility types. These types should be studied in a comparative way according to (1) their characteristics, such as size, shape, temperament, powers of flight and ability to forage, time required to mature, hardiness or adaptation to climate, persistence in sitting, ability to lay; and (2) purpose and adaptation to conditions, including value as egg producers, as broilers, roasters, and capons, and system of culture to which the type is adapted.

A study of breeds.—After these types have been studied, then a more detailed study may be made of the breeds important in the locality. While this study may include the origin and relationship, the chief aim should be to develop in the minds of the students correct ideas of the shape of the fowls, as that is the chief breed characteristic. If time permits, consideration may be given the official score cards of the breeds studied.

Although the students may have a general knowledge of the varieties which constitute the breeds considered, a detailed study of varieties should be a matter of individual study, or if taken by the class, should be confined to one or two varieties where such are bred rather exclusively in the school district.

JUDGING POULTRY.

*Use of the score card.*¹—The score card or standard of perfection is used more extensively with fowls than with other farm animals, so that if there is any time for giving the students a start toward becoming expert judges, attention must be given the instructions, descriptions, and standards in the American Standard of Perfection. As a preliminary to the use of the score card the students should know the naming of the parts of a fowl. Terms applied to judging may be learned in their use. Charts will be helpful in learning the nomenclature, the various types of combs, shapes of fowls, and the common defects. The fowls must be in small coops, so they may be readily handled for effective judging. In such coops they may be brought to the school, thus saving time. The instructor should show the students how to handle the fowls and examine them for minor defects without rumpling the plumage.

In connection with a study of the utility type best adapted to the school district, it will be profitable practice for the class to work out a score card along utility lines and use this card on the local fowls.

Comparison judging.—Whether the students use a score card or not, they may spend time profitably in comparative judging. At first a number of fowls may be placed according to order of merit in one of the factors important from either a utility or a standard point of view. The following factors are suggestive: (a) Constitution, (b) weight, (c) shape or symmetry, and (d) color. After they have been placed according to each one of these factors they may be placed according to merit with all factors considered either as standard-bred fowls or for utility or breeding purposes. Repeated practice in estimating the weight and age of fowls may be given with profit.

A POULTRY EXHIBIT.²

Of all farm animals poultry are the most convenient and often the only farm animals which are convenient to exhibit at the school. Such an exhibit may include fowls from the whole community, in addition to those owned by the students. The exhibit if properly planned and managed, will do much to arouse and maintain interest as well as furnish material for judging. While an experienced man from the community or a professional judge from the outside may pass final judgment on the fowls which may be competing for prizes or honors, such an excellent opportunity for competitive judging for the students should not be neglected.

AN EGG-LAYING CONTEST.

Some of the schools which have established poultry plants at the school have had difficulty in maintaining interest. Several of these schools have developed interest through an egg-laying contest at the schools. As an outgrowth of a discussion of the relative merits of different breeds and varieties in regard to laying, the students have brought to the school three or four hens or pullets which are kept under uniform conditions, trap nested, and a record kept of feeding and production. Although such a contest may have no value in determining the relative merits of the breeds participating, it serves to hold the interest of the students while they are getting practical instruction in poultry management.

Where it is not feasible to keep poultry at the school, an egg-laying contest may become a feature of the home-project work. Although the chief aim of the project may be egg production, wherever the students have fowls of different breeds, varieties and strains, the contest feature may center about the fowls as well as the students. Directions for such an egg-production contest will be found on page 32 of Office of

¹A score card for breeding stock may be obtained from the Bureau of Animal Industry, United States Department of Agriculture.

² See S. R. S. Doc. 42. Agricultural Exhibits and Contests.

Experiment Stations Bulletin 255, Educational Contests in Agriculture and Home Economics. Directions for a poultry-management project will be found in the Agricultural Education Monthly, Vol II, No. 8, November, 1916.

REFERENCES.

The following Farmers' Bulletins of the United States Department of Agriculture:

- 51. Standard Varieties of Chickens.
- 106. Breeds of Dairy Cattle.
- 573. The Angora Goat.
- 576. Breeds of Sheep for the Farm.
- 612. Breeds of Beef Cattle.
- 619. Breeds of Draft Horses.
- 684. Squab Raising.
- 697. Duck Raising.
- 765. Breeds of Swine
- 767. Goose Raising.
- 779. How to Select a Sound Horse.
- 791. Turkey Raising.
- 803. Horse-breeding Suggestions for Farmers.
- 806. Standard Varieties of Chickens. I. The American Class.
- 811. The Production of Baby Beef.

The following bulletins may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices listed:

- B. A. I. Circular 113. Classification of American Carriage Horses, 5 cents.
- B. A. I. Bulletin 34. American Breeds of Beef Cattle, 20 cents.
- Dept. Bulletin 20. Domestic Breeds of Sheep in America, 25 cents.
- Dept. Bulletin 434. Judging the Dairy Cow as a Subject of Instruction in Secondary Schools, 5 cents.
- Dept. Bulletin 487. Judging Horses as a Subject of Instruction in Secondary Schools, 10 cents.